

Please replace paragraph 18 on pages 5 and 6 with the following substitute paragraph.

A2 [0018] The arrangement shown in Figure 1 forms an extremely versatile and flexible overall system for combined transmission and epi-fluorescence microscopy. It does not require additional transmission illumination and can be selectively operated as a transmission microscope or as an epi-fluorescence microscope with a single light source by quickly changing the wavelength of the light source between the illumination light and the excitation light. A particularly suitable light source, which can be switched quickly between different wavelengths, is described in the German DE 42 28 366, where white light is guided via a parabolic mirror onto a holographic reflection grating, which is turned by way of a scanner and diffracts light with a spectral composition, which depends on the angle of rotation of the reflection grating, onto the parabolic mirror, from where it is supplied via an optical fiber to the excitation beam path of the microscope. Similar embodiments of a light-source corresponding to DE 42 28 366, but with direct coupling to the microscope without the use of fibers can also be imagined.

In the Claims:

Please amend claims 2, 9-11 & 16 as follows.

A3 2. (Amended) The microscope device as claimed in claim 1, wherein said light source is a light source for producing transmitted light illumination and epi-fluorescence illumination.

A4 9. (Amended) The microscope device as claimed in claim 1, wherein said objective lens is operable to be optically coupled to the specimen via an immersion liquid for transmitting the light beam from said light source to the specimen.